

XLIV.—*Additions to the Fauna of Ireland, including descriptions of some apparently new species of Invertebrata.* BY WILLIAM THOMPSON, Pres. Nat. Hist. and Phil. Society of Belfast.

[With a Plate.]

Species thus marked † before the names were indicated mostly by a generic name only, in my Report on the Invertebrate Fauna of Ireland, published in the Reports of the British Association for the Advancement of Science for 1843: those unmarked are subsequent additions.

BIRDS.

*Vultur fulvus*, Linn., *Gyps vulgaris*, Savigny.

Late in the autumn of 1843 Mr. Yarrell favoured me with the information that he had received a letter from Admiral Bowles, written from the south of Ireland, in which this gentleman mentioned having lately seen a living vulture at Castle Martyr, the seat of the Earl of Shannon, and which was said to have been captured in the county of Cork. The attention of Mr. R. Ball being called to the circumstance, he made inquiry of Lord Shannon, who replied, that the bird was purchased by his steward for 2s. 6d. from a peasant, who stated that he caught it on the sea-shore in that neighbourhood: its plumage was in good order. His lordship politely offered the bird to Mr. Ball for the collection in the Garden of the Zoological Society, Dublin, but before arrangements were completed for its transmission it died. The specimen was, by the directions of Lord Shannon, carefully preserved and stuffed and placed at the disposal of Mr. Ball, who has added it to the collection in Trinity College, Dublin. It is in adult plumage.

Although we cannot tell whether this bird may not have escaped from some vessel, still it need not excite surprise if the *Vultur fulvus* should wander to this island, inhabiting as it does (according to Temminck) the mountains of the north of Europe, the Alps? and Pyrenees. Another species of European vulture, the *Cathartes percnopterus*, was once shot in Somersetshire\*.

Flat-billed Sandpiper, *Tringa platyrhyncha*, Temm.; Gould, Birds of Europe, "part 17"; Yarrell, Brit. Birds, vol. ii. p. 638.

Of this *Tringa* only one specimen is recorded as met with in

\* *Pycnonotus chrysorrhæus*, Swainson.—At the meeting of the British Association held at Cork in 1843, I exhibited at the Natural History Section an example of this African species sent for inspection from the collection of native birds, or those killed in Ireland, belonging to Dr. Burkitt of Waterford. The following particulars respecting the bird, though mentioned at the meeting, have not been published. Dr. Burkitt "purchased it from a country-lad who brought it into Waterford in January 1838 with a number of blackbirds [*Turdus merula*] and snipes, and who thought it was a hen blackbird: he shot it at Mount Beresford, three and a half miles from Waterford." There can therefore be no doubt of the specimen having been killed in this country.

Great Britain. It was noticed by Mr. Hoy in the first volume of Charlesworth's 'Magazine of Natural History' as having been "shot on the 25th of May 1836, on the muddy flats of Breydon Broad, Norfolk, in company with some dunlins and ring plover." In a locality of a similar nature—the oozy banks of Belfast bay—a *Tringa platyrhyncha* was killed on the 4th of October 1844, at the same shot from a swivel-gun with eleven golden plover and seven or eight dunlins.

It is a male bird, and larger than the English specimen, but of about equal size with that described by Temminck. It is as follows\* :—

	in.	lin.
Length (stuffed specimen) .....	7	0
——— of wing from carpus to end of quills .....	4	3½
——— of tarsus .....	0	11
——— of middle toe and nail .....	0	10
——— of hind toe and nail .....	0	3
——— of bill from forehead to point.....	1	3¾
Breadth of bill at base (now dried up) .....	0	2½
Height of bill from base of upper to that of lower mandible...	0	4
Tibia bare of feathers for about .....	0	4

Temminck's descriptions (vol. ii. p. 616. 2nd edit.) of the plumage of the young bird before its first moult and of the nuptial garb show singularly little difference in a species belonging to this family, and Mr. Yarrell having both the old bird in its breeding plumage and the young bird of the year before him, remarks that "the young bird so closely resembles the parent in its plumage at this season that it is unnecessary to describe it." My specimen agrees with the descriptions of these authors, excepting in what the ornithologist will be prepared to expect of a bird killed in the month of October—that the rufous tints throughout the plumage (margining the feathers, &c.) have all but disappeared, and are replaced by white. The winter plumage I have not seen described, but fortunately the presence of a few winter feathers on the back and wings of the present specimen sufficiently indicate that a change from black to gray, analogous to the seasonal change which takes place in the dunlin, likewise occurs in this species. The hue of these feathers however resembles more the pretty gray colour of the phalarope than the pale brownish gray of the dunlin—or purre, as it has been termed in winter garb.

The broad bill and the peculiar marking of the head are the most obvious distinctive characters of this species. The dimensions of the bill have already been given: the plumage of the head may be thus described—from base of upper mandible, to top of head a narrow blackish brown band, which broadens towards the hinder part of the head; on either side of this from the bill to the upper part of the eye, and continued over it is a white streak, bounded by a dark

\* The taxidermist noted the specimen before being skinned to be in length 6¾ inches, breadth 13 inches; weight 1 oz. 4¾ drachms.

brown band, which reaches from the side of the bill to the eye; throat white.

This is a very interesting species to the ornithologist from the circumstance of its presenting the characters of different genera. Its general aspect—body plumage, delicate tarsi and feet—is that of a *Tringa*, but in the form of the head, breadth between the eyes and broad base of bill we are reminded of the genus *Scolopax*, or true snipes, as we likewise are in the brown and white banding of the head, in which latter respect it likewise resembles the whimbrel (*Numenius phaeopus*). The very small rudimentary membrane between the base of the middle and outer toe, mentioned by Temminck as the chief character on which it has been raised to the rank of a genus by MM. Koch and Naumann, is a most trivial distinction, it being in the least degree only more developed than in the *Tringa variabilis* and *T. subarquata*. Except in the head and bill, the whole bird is in form and plumage an ordinary-looking *Tringa*.

In the continental countries south of our latitude in which this species has been met with, it is considered very rare, nor was it known to be otherwise in the north of Europe until Mr. Dann lately visited Norway and Lapland for the purpose of studying the birds which frequent those countries in the breeding season. In some places he found this *Tringa* to be by no means uncommon, and to Mr. Yarrell's beautiful work on 'British Birds' (vol. ii. p. 638) he contributed a full and admirable account of its habits, which were before unknown—the figure of the bird in this work is most characteristic. Temminck mentions specimens having been sent from Borneo, Sumatra and Timor.

American Wigeon, *Mareca Americana*, Wilson (sp.), Amer. Ornit. vol. iii. p. 109. pl. 69. Jardine's edit.; Yarrell, Brit. Birds, vol. iii. p. 196.

Towards the end of February 1844, Henry Bell, an intelligent man of middle age, who since he could carry a gun has been a wildfowl- (and more especially a wigeon-) shooter in Belfast bay, and for the last eight or nine winters has given up his whole time to the pursuit, earning by it his livelihood, visited Strangford lough "professionally" with his punt and swivel-gun. Hearing on a dark night the call of wigeon\*, he fired towards the place whence the sound proceeded, and picked up a single bird, which differed in plumage from any he had ever seen. Its form at once marked this bird to his eye as a wigeon of some kind, but in a state of plumage unlike that of the common species of either sex at any age: of this he was a good judge from many hundreds having passed through his hands, and from his being very observant of the species of birds and the changes of plumage through which they pass. He described it as a *wigeon* in the plumage of a *teal*. The large markings

\* According to Wilson's description of the call of the American wigeon, it is very like that of the European species.

on the lower part of the sides of the neck and on the breast were, instead of being roundish as in the teal, somewhat of a semicircular form, and varied in size from "one half to nearly the whole size of a man's finger-nail." Like the old male wigeon it was whitish, but of a purer colour, on the top of the head, and like it had the white marking on the wing, both characters denoting an old male bird of its species. On the figures of the American wigeon in the works of Wilson (Jardine's edit.) and Yarrell being shown to the shooter, he felt confident that his bird was of the same species, the former representing its plumage the better of the two, and the latter its form, as the neck was thicker than that of the common wigeon. Although he thus noted the bird particularly, and with another shooter who accompanied him to Strangford, held a kind of inquest on its species, it was unfortunately sold with his other wildfowl, as from having seen singular varieties of birds in the hands of bird-preservers, he thought this might be a remarkable state of plumage of the common wigeon:—of a second species he had not at that time heard. He is certain of having killed other birds of the same species in Belfast bay, but never any so far advanced towards adult male plumage. Placing entire reliance on the discrimination and accuracy of Bell, I have not hesitated to add this bird to our fauna, although other naturalists may not be inclined on such testimony to admit its claim to be so recorded.

To the same shooter we are indebted for the specimen of *Tringa platyrhyncha* just noticed; he at once perceived that it was distinct from the dunlins killed at the same time, and preserved it accordingly.

#### FISHES.

Ray's Sea Bream, *Brama Raii*, Cuv. and Val.

To Dr. R. J. Burkitt of Waterford we are indebted for the positive addition of this species to our fauna, this gentleman having lately contributed a native specimen to Mr. R. Ball for the Museum of Trinity College, Dublin. The fish (of which a large and correct drawing has been sent me) was taken at Tramore in the month of October 1843. It is the first certain instance known to me of its occurrence on our coast. Mr. Yarrell\* gives it from M'Skimmin's 'List of the Fishes of Carrickfergus,' but as remarked in my Report on the Vertebrata of Ireland, "the propriety of the application of the name to this species is doubtful." All that is said of it by M'Skimmin is, "*Sparus Raii*; hen-fish, a choice fish; rare." The term hen-fish is applied by our fishermen to one or two other species of somewhat rare occurrence.

#### MOLLUSCA.

*Doris obvelata*, Johnst., Annals of Nat. Hist. vol. i. p. 52. pl. 2. fig. 4—7 (not of Müller).

In July last Mr. Hyndman procured a specimen of this *Doris* on

\* Brit. Fishes, vol. i. p. 134. 2nd edit.

*Fuci* at Skerries, Dublin coast. On its being submitted to the inspection of Mr. Alder, by whom the original specimen described by Dr. Johnston was discovered in Berwick bay, he remarked, that the species "appears to be pretty generally diffused, but nowhere common." He had obtained it last summer in Rothesay bay.

†*Doris Ulidiana*, Thompson.

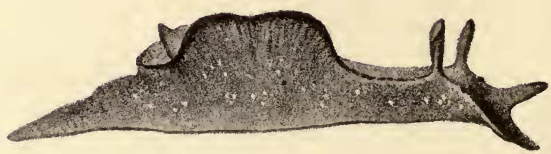
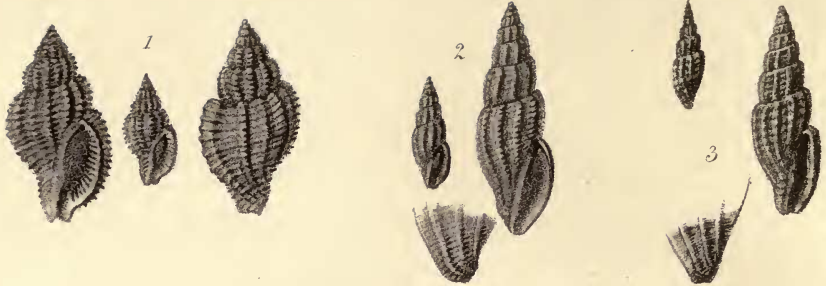
On the 17th of February 1840, I procured three specimens of this *Doris* among oysters brought to Belfast market from the neighbouring coast of Down or Antrim, and after noting their general appearance, colour, &c., set them apart as species unknown at least to the British fauna. Mr. Alder having some time ago expressed a wish to see my collection of Nudibranchiate Mollusca, it was placed in his hands, and on this species coming under examination it was considered by him and Mr. Hancock to be new, and a description of it drawn up for their own use was kindly communicated to me. This is as follows;—within parentheses are my notes on the colour of the living *Doris*.

*Doris Ulidiana*.—"Length, from spirits,  $\frac{1}{2}$  inch, breadth  $\frac{1}{4}$  inch; ovate-oblong, rather straight at the sides, depressed [of a uniform pale yellow, the intestines appearing through the skin of a dark colour]. Cloak not extending much beyond the foot, rough with spicula, and covered with large, unequal, obtuse tubercles, the spicula collected in bundles in the tubercles and radiating at their base. Tentacula [long and whitish], lamellated, without sheaths; the edges of the apertures plain. Branchiæ consisting of eleven [beautifully white] pinnated plumes, set in a semicircle round the anus. Foot rather broad. Veil above the mouth semicircular."

On being put in diluted spirits of wine, the tentacula were entirely withdrawn, and the branchial processes lost their beauty by discoloration, which changed them to the same hue as that of the body.

On comparing these specimens at the time they were procured with the most nearly allied species in my possession, the *Doris muricata*, Müller (Zool. Dan.), they were noted down as being certainly distinct from it:—in being of a more elongate shape, in having the tubercles differently formed, and, in proportion to the dimensions of the body, their being not more than half the size of those of *D. muricata*. Messrs. Alder and Hancock made the following comparative observations: "Comparing your *D. muricata* [a species they had not seen before] with our *D. aspera* and your *D. Ulidiana*, we come to the conclusion, so far as we can judge from specimens in spirits, that these three are distinct, though nearly allied species. *D. Ulidiana* differs from *D. muricata* in its much larger size, and longer and more depressed form. The tubercles appear to be more depressed, and the branchial plumes larger. From *D. aspera* it differs also in size and shape; in having larger tubercles, the cloak narrower, and the foot broader."





*Polycera punctilucens*, D'Orbigny, Guérin, Mag. Zool. 1837, p. 7. pl. 106.

Professor Allman obtained this *Polycera* in a pool at Courtmasherry harbour, county Cork, in the month of August last. The species was originally described from specimens taken on the coast of France; it has not yet been procured on that of Great Britain. The specimen was submitted to the judgement of Messrs. Alder and Hancock, and will be fully noticed in their forthcoming work on the British Nudibranchiate Mollusca.

*Eolis violacea*, Alder and Hancock, Ann. Nat. Hist. vol. xiii. p. 166 (March 1844).

Mr. Hyndman, when dredging on the 26th of August last off Castle Chichester, Belfast bay, in 6 to 10 fathoms water, captured a specimen of this very beautiful *Eolis*. It was brought to me alive, and immediately afterwards despatched by post in a phial of sea-water to Newcastle for Mr. Alder's examination in a living state, but on reaching its destination was unfortunately dead. Mr. Alder remarked that it was a very fine example of his *E. violacea*, which was described from a Cullercoats specimen smaller and less perfect than this had been.

*Aplysia nexa*, Thompson. Plate XIX. fig. 8.

Animal elongate, deep carmine-red, mantle bordered with black.

Length 1 inch; much elongated; foot very narrow; two black eyes anterior to, but a little distant from the base of the dorsal tentacula.

Colour deep carmine-red, occasionally with a few minute white spots; mantle and anterior tentacula bordered with black, dorsal tentacula tipped with black.

Shell?

The specimen of this *Aplysia* was dredged on the 26th of August 1844, off Castle Chichester, Belfast bay, by Mr. Hyndman—depth 6 to 10 fathoms.

The characters which this beautiful little *Aplysia* has in common with *A. depilans* need not be given. Whether we consider it distinct from, or a mere variety of that species, it differs from it in being of a more elongate form, in colour, and in having the mantle, &c. bordered with black. From a single example only I should not venture to describe it as a distinct species, but on sending my specimen (its characters being first noted down) alive in sea-water to Newcastle-upon-Tyne for Mr. Alder's examination, he replied, that an *Aplysia* similar in form and colour had been taken by him at Torbay in Devonshire about two years before, but not having had much opportunity of studying the genus, he felt uncertain whether it should be considered a variety of an *A. depilans* or a distinct species. Neither do I feel certain on this point until an equally small *A. depilans* be had for comparison, but it seems to me better to describe and figure the form in question and leave the matter of species for

*Ann. & Mag. N. Hist. Vol. xv.* Z



future decision than to be altogether silent on the subject. A coloured drawing of Mr. Alder's specimen being kindly transmitted to me, it was found to represent mine exactly, except in the very trivial difference of having a few minute white spots on the sides instead of being of a uniform colour. Specimens of *A. depilans*, which I have often taken (but never of so small a size), differ in being occasionally spotted as well as plain. But I have never met with this species of the same form as *A. nexa*, of its fine deep-red colour, nor having any black border to the mantle, &c. ; nor has Dr. J. L. Drummond ever done so, though great numbers came under his examination when dredging at Donaghadee, on the coast of Down, in the summer of 1843.

*Hab.* Torbay, England ; Belfast bay, Ireland.

*Acteon viridis*, Mont. (sp.), Quatrefages, Ann. Sci. Nat., March 1844. *Aplysia viridis*, Mont., Linn. Trans. vol. vii.

With a letter, dated from Glandore House (county Cork), Aug. 23, 1844, Professor Allman sent me a small phial containing specimens of this *Acteon*, remarking that he had just taken it there in considerable numbers. He subsequently, at the meeting of the British Association at York, gave an admirable account of the anatomy of the species, illustrated by drawings of remarkable beauty, executed by his sister, Miss Allman. In consequence of the *Acteon* being thus brought forward, this brief note might be cancelled ; but as the species had previously a place in my "Additions," it is retained with this explanation. About the same time the Rev. Mr. Landsborough informed me that he had taken this species on the coast of Arran, Frith of Clyde.

† *Bulla producta*, Brown, Illus. Conch. p. 57. pl. 19. figs. 15, 16 ; 2nd edit.—pl. 38. f. 15, 16 ; 1st edit.

Among shell-sand collected at Bundoran, on the western coast, by Mrs. W. J. Hancock in 1840, and sent to Mr. Hyndman, was a specimen of this *Bulla*. Capt. Brown notices it merely as "found at Dunbar by General Bingham."

*Utriculus*, genus, Brown, Illus. Conch. pp. 58, 59, pl. 19 ; 2nd edit.—pl. 38 ; 1st edit.

Having lately left with Mr. Alder a number of *Bullæ* (obtained with the last species at Bundoran) which he wished to examine critically, he reported on them as follows :—"On examining the fine suite of *Bulla hyalina*, I think I make out three of Brown's species of *Utriculus* : *U. candidus* being the full-grown shell ; *U. pellucidus* the half-grown ; and *U. minutus* the youngest state of *B. hyalina*. At least these answer very well to his figures and descriptions." The last two are noticed by Capt. Brown as from Dunbar only, where they were found by General Bingham, as was *U. candidus* also ; but this is mentioned as having been subsequently procured at Holy Island, off the coast of Northumberland, by the author himself.

*Volvaria subcylindrica*, Brown, Illus. Conch. p. 3. pl. 19. figs. 19, 20; 2nd edit.—pl. 38. f. 19, 20; 1st edit.

Among the Bundoran shells was one on which Mr. Alder made the following remarks: "Capt. Brown's *Volv. subcylindrica* agrees with it in outline, but he describes the species as smooth, while this shell has both longitudinal ridges of growth and transverse striae. The latter however are very faint, and in a worn shell neither of them might be visible. I am inclined therefore to consider them the same, but leave it to your own judgement to decide the question." To the better judgement of Mr. Alder I prefer to leave it; his knowledge too of the British marine Mollusca is very complete, whilst mine is very superficial, and must remain so, my eyes being now unable without injury to bear even the lowest magnifying powers. But that my friends kindly "lend me *their eyes*," I could not include the minute species. All that Capt. Brown says of the locality of this shell is—"discovered at Dunbar by General Bingham."

*Rissoa costulata*, Risso, Alder in Ann. Nat. Hist. vol. xiii. p. 324. pl. 8. figs. 8, 9, May and June (figures) 1844.

When looking over the collection of Mr. Alder in October last, he pointed out a specimen of this shell which had been given him by Dr. Farran of Dublin, who procured it at Roundstone on the Galway coast.

The specimens described in the 'Annals' were from Torbay, Devonshire.

*Rissoa Warreni*, Thompson. Plate XIX. fig. 4.

On my submitting this species and the following (which I could not find described) to Mr. Alder's opinion, he believed them to be new, and before returning the specimens, wrote descriptions and made drawings of them for his own guidance. Having offered to copy these for my use if desired, I gladly availed myself of the proffered kindness, feeling well-satisfied that the descriptions would be better than any drawn up by myself, and that the figures would be most faithful.

*Rissoa Warreni*.—"Shell slender, tapering, thin, transparent yellowish white, with six much rounded and deeply divided whorls terminating in a rather fine point, the nucleus sunk in the apex. Aperture oblong-oval: outer lip thin, without rib: inner lip not reflected, but having a deep umbilicus behind it. The shell is slightly wrinkled by the lines of growth, and is delicately striated spirally; the striae can only be seen with a good magnifier, and are most distinctly observable at the base. There are also some faint indications of small obsolete ribs on the middle whorls. Length two-tenths of an inch; breadth one-twelfth."

Two specimens were found at Portmarnock (Dublin coast) by T. W. Warren, Esq.

†*Odostomia crassa*, Thompson. Plate XIX. fig. 5.

Of this shell a single specimen was sent me from Roundstone,

Galway coast, in Oct. 1840, by Wm. M'Calla. Mr. Alder describes it:—

“Shell thick, conical, opaque, of a dull dirtyish white, with five flat whorls, the last occupying about two-thirds of the shell. The apex is slightly oblique; the upper whorls smooth, the last rugose, bulging and rather flattened in the middle, having strong coarse striæ crossed by indistinct lines of growth. Aperture ovate, white and polished internally: outer lip thick, acute at the edge: inner lip reflected on the pillar with a deep impression behind it, but no umbilicus. Tooth strong. Length  $1\frac{1}{2}$  tenth of an inch; breadth nearly 1 tenth.”

† *Buccinum Zetlandicum*, Forbes, Loudon's Mag. of Nat. Hist. vol. viii. p. 593. fig. 62.

A *Buccinum* taken on a long line in deep water near Bunowen, county Galway, is considered by Professor Forbes to be his *B. Zetlandicum*, though differing in its being a thin shell, &c.—he does not now feel certain of this being more than a variety of *B. undatum*. The specimen is in the collection of Dr. Farran, who states that others were procured by similar means.

† *Pleurotoma Farrani*, Thompson. Plate XIX. fig. 3.

Shell fusiform, turreted, with nine volutions (well-marked), and ten prominent ribs (on body whorl); closely-set deep striæ extending spirally over the whole shell.

Length 7 lines; breadth just above aperture 2 lines; longitudinal ribs very prominent, “not continuous from whorl to whorl,” and slightly angulated at summit; aperture occupying nearly 3 lines in length, elongate ear-shaped, strong rib of body whorl appearing just outside it; canal wide and long, turning a little obliquely to the left; outer and pillar lip smooth.

Colour pale yellowish brown, with numerous darker brown narrow bands equal in breadth to the lighter coloured space between them, winding spirally round the shell, and giving it when magnified a very handsome appearance; a single brown band of a much darker hue at the top of each volution. This species comes near *P. Smithii*, Forbes, ‘Annals of Nat. Hist.’ vol. v. p. 107. pl. 2. fig. 14.

Of this shell, handsome both in form and colour, two specimens were obtained by Dr. Farran on the Irish coast, he thinks at Portmarnock.

† *Pleurotoma Ulidiana*, Thompson. Plate XIX. fig. 2.

Shell fusiform, turreted, with eight volutions, eleven ribs (on body whorl) with coarse deep spiral striæ.

Length 7 lines; breadth just above aperture  $2\frac{1}{4}$  lines; volutions very slightly ventricose, rather flattened at top, but less so than in *P. turricola*; ribs strong and coarse, “not continuous from whorl to whorl;” coarse cut striæ across ribs and furrows; aperture crescentic; outer lip thin and in form of a bow; pillar-lip somewhat hollowed; canal very short.

Colour uniform dirty brown.

This species—coarse in form and sculpture, and plain in colour—closely approximates *Pleur. brachystomum*, Philippi, Enum. Moll. Siciliae, vol. ii. p. 169. pl. 26. f. 10, from which I could not regard it as distinct but for a single character possessed by that species in raised spiral striæ. These are apparent in the profile of the shell as figured by Philippi; they are much more numerous too than the deep striæ of *Pleur. Ulidiana*.

Three specimens of this shell were dredged from a depth of about 8 to 10 fathoms by Mr. Hyndman and myself in Oct. 1834 in Strangford lough, county Down.

†*Triton elegans*, Thompson. Plate XIX. fig. 1.

Shell turreted, somewhat ventricose, about eight volutions, numerous prominent ribs crossed by fine raised spiral striæ.

Length 7 lines; breadth just above the aperture  $3\frac{1}{4}$  lines; ribs on each volution at regular distances from each other, except on the body whorl, where within three lines of the outer lip they cease, and substituted for them is one large varix equidistant between the lip and last rib; number of ribs on body whorl twelve, but this number may rather be individual than specific; ribs not continuous from whorl to whorl; aperture oval; canal oblique, widening gradually to base; outer lip with slightly grooved striæ within; pillar-lip smooth, except at top, where two ridges appear.

Colour greenish white with two double spiral lines of yellow, one series above the top of aperture, the other rather below it.

This species is more handsomely formed, sculptured and coloured than *Triton erinaceus*; its canal is much shorter.

I have seen only a single specimen, which was found alive at Portmarnock, on the Dublin coast, by Dr. Farran.

†*Cardium Lovëni*, Thompson. Plate XIX. fig. 7.

Shell of a somewhat rounded outline with about thirty ribs, set with small scales; height and length equal; colour pure white.

Length  $3\frac{3}{4}$  lines; breadth  $3\frac{3}{4}$ ; very thin and delicate; ribs rounded, about thirty in number and becoming beautifully fine towards the beak, covered with minute closely-set transverse scales throughout, but which are more numerous on the ribs at each side; furrows about the middle of the valve smooth and shining, narrower than at the sides, where towards the base they are crossed by transverse scales, and towards the apex punctate—near the beaks they appear in the form of a mere linear depression.

Colour pure white, with somewhat of a pearly lustre inside and outside.

Compared with the British species of *Cardium*, this comes nearest *C. edule*, but is more handsome in form, sculpture and colour. It is more rounded (less truncate at the anterior end), has the beaks terminating in a finer point, ribs more numerous and with the scales on them more closely set, but less elevated, the furrows narrower.

*Cardium scabrum*, Philippi, Enum. Moll. Siciliae, vol. ii. p. 38. pl. 14. fig. 16, comes so near my shell, that future investigation may

possibly show that they should be brought together: *C. scabrum* differs from it in having only twenty-six ribs, in the furrows being equal and punctate, and in its exhibiting two obscure violet rays, and having the beaks yellow; but as my specimens were not seen in a living state, stress need not be laid on the difference of colour.

This species was obtained in three localities\* nearly about the same time. In October 1841 numbers of it, but mostly broken, were found by Dr. Farran in the stomachs of sole (*Solea vulgaris*) purchased in Dublin market, and taken off our eastern coast; in June 1842 Mr. Hyndman dredged a very few specimens from a depth of 50 fathoms, off the South Rock, coast of Down; and specimens which I have seen in Mr. Cuming's unequalled collection were sent him by Dr. Lovén in 1842 as a species unknown to him, and which had been obtained on the west coast of Sweden. It is named in honour of this distinguished naturalist.

† *Amphidesma intermedia*, Thompson. Plate XIX. fig. 6.

Shell oval-oblong, nearly equilateral, white with prismatic colours.

Length  $2\frac{3}{4}$  lines; breadth 4; thickness  $1\frac{1}{4}$ ; beaks almost central; shell nearly equilateral, rounded at each end, more particularly at the posterior; thin, semi-transparent, glossy, white with prismatic hues.

This species is intermediate in form or outline between *Amph. prismaticum* and *A. Boysii*, and also in general characters, but on the whole may perhaps be said to approximate the latter the more nearly; its form however at once marks it as distinct from *A. Boysii*, than which it has the beaks more central, is broader and more equilateral, has the apex rather more marked and pointed, and is beautifully iridescent inside and outside—the teeth do not present any marked differential characters.

\* Should *C. scabrum* prove identical, in four localities—from Sweden to Sicily—this has been discovered subsequent to the publication of Philippi's first vol. in 1836, and is for the first time described in his second vol. which appeared in 1844.

† *Modiola vestita*, Philippi, Enum. Moll. Siciliæ, vol. ii. p. 51. tab. 15. fig. 12 (1844).

This *Modiola* is included in my Report on the Invertebrata of Ireland, but without any specific name being applied to it. A reference to the above work as soon as it appeared showed that the Irish shell is the *M. vestita*, known to Philippi only as found on the shore at Malta.

In a letter from Mr. Alder written on the 1st of April 1844, it was mentioned that among shells lately sent from the Mediterranean to Mr. King, Curator of the Newcastle Museum, were two specimens similar to the Irish shell: they "were imbedded in sponge, and one inch and one inch and a quarter respectively in length, and a little thicker from being older shells, but in all other respects the same." In May last I saw *Modiolæ* of this species from the Mediterranean in Mr. Cuming's unrivalled collection.

The only Irish specimen of this shell yet known was procured some years ago at Youghal by Miss M. Ball. It is described and figured in the second edition of Brown's 'Illustrations,' p. 132. pl. 37. fig. 36, under the name of *Modiola Ballii*.

Two examples of this species were dredged from a depth of about 6 fathoms in Strangford lough near Portaferry in August 1837 by Mr. Hyndman and myself; and two more were in like manner procured by us in July 1840 when with Mr. Edward Forbes and Mr. R. Ball dredging in Killery bay on the western coast—depth from 3 to 12 fathoms.

CRUSTACEA\*.

*Polybius Henslowii*, Leach, Malac. pl. 9. Desmarest, Consid. Crust. p. 100. pl. 7. fig. 1. (copied from Leach). Edwards, Hist. Crust. vol. i. p. 439.

A crab of this species was obtained at Crook Haven, county Cork, in August last by Professor Allman, who kindly sent it to me. It was remarked at the same time by its captor that the species appears to be "eminently natatory," and that "the one taken was swimming with great ease near the surface of the water among shoals of *Acalephæ*." It would appear, from the general work of Milne Edwards on the Crustacea, that this is the only species of its genus known. It was described by Leach from specimens taken on the coast of Devonshire, and is given by M. Edwards as one of the species of La Manche, these being the only localities noticed for it in the two works.

*Nymphon Johnstoni*, Goodsir, Edin. Phil. Journ. January 1842, p. 136. pl. 3. fig. 4.

The first specimen of this *Nymphon* which I have seen was taken by Dr. J. L. Drummond at Macedon point, Belfast bay, upwards of twenty years ago. From 1834 to the present time I have occasionally procured it on the north-east coast. From the "German Ocean" Mr. Goodsir's specimens were derived.

*Nymphon spinosum*, Goodsir, Edin. P. J. January 1842, p. 136. pl. 3. fig. 3.

Examples of this species have been taken in Belfast bay, &c. No locality is mentioned by Mr. Goodsir, but his specimens are probably from the Firth of Forth.

*Pasithoe vesiculosa*, Goodsir, Edin. P. J. Oct. 1842, p. 365. pl. 6. fig. 17.

My specimen of this rare form was dredged at Dalkey island, bay of Dublin, in August 1840: R. Ball, E. Forbes, W. T.: Mr. Goodsir's was procured in the Firth of Forth.

\* *Irenæus splendidus*, Goodsir, Edin. Phil. Journ. Oct. 1843, p. 339. pl. 6. fig. 1—9.

Although this species is unknown to me as Irish, it seems desirable, from its being as yet recorded only as inhabiting a part of the eastern coast of Scotland, to mention, that it frequents the western coast of that country likewise, several specimens having been captured by Mr. Hyndman in a towing-net at the Kyles of Bute in the month of June last. Their green colour especially attracted attention.

My *Pasithoe*, together with the two species of *Nymphon* and the *Irenæus*, have been seen by Mr. Goodsir.

*Udonella caligorum*, Johnston, Loudon's Mag. Nat. Hist. vol. viii. p. 496. f. 45.

Numerous parasites of this species were attached to a *Caligus* on a gray gurnard (*Trigla Gurnardus*), captured on the coast of Down on the 22nd of June last by Mr. Hyndman.

#### ANNELIDA.

##### †*Borlasia alba*, Thompson.

Dec. 18, 1843.—Two worms, apparently of the genus *Borlasia* (Johnston, Mag. Zool. and Bot. vol. i. p. 536) and of the same species, were found on the beach a short way northward of Carrickfergus by Mr. Hyndman and myself. They were lurking under stones between tide-marks. The species may be described as new, under the name of *Borlasia alba*:—of a whitish colour throughout, excepting behind the eyes on each side, where a reddish spot appears; eyes fourteen; the first four on each side near the margin of the body disposed in a line, and at equal distances from each other; considerably behind them are three at each side disposed in a triangular manner, the base towards the head of the worm: entire length 2 inches when stretched out so that its breadth is 1 line or  $\frac{1}{12}$ th of an inch.

The annexed outline shows the position of the eyes.



1. Reddish spots.

*Planaria cornuta*, Müll. Zool. Dan. vol. i. p. 37. tab. 32. f. 5—7; Johnston, Mag. Nat. Hist. vol. v. p. 344, with woodcuts.

Aug. 26, 1844.—Mr. Hyndman dredging today off Castle Chichester, just within the entrance of Belfast bay, and at a depth of from 6 to 10 fathoms, took three specimens on *Laminariæ*. Although the figures of this *Planaria* in the works cited differ a good deal, I agree with Dr. Johnston in believing them to represent the same species. The Irish specimens as observed at various times were more round in outline than Dr. Johnston's figures, and consequently quite different from those of Müller in that respect. The network of reddish "vein-like ramifications" on a cream-coloured ground renders this *Planaria* viewed as a whole very beautiful: the multitude of dot-like black eyes on a rich white ground too looked very elegant from the contrast of the white to the general reddish hue of the animal. Its progress, as Dr. Johnston remarks, "for a worm" is not slow: the tentacula were always reflected backwards so as not to be visible in a profile view. The species has been already so fully described that further observations are unnecessary. One which I left gliding about in sea-water apparently in perfect health, was when I looked at it again after eighteen hours not only dead, but almost wholly decomposed.